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09/843,816	04/30/2001	Jacob McGuire	200704487-1	9954
22879 7590 10/30/2008 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				
EXAMINER				
AILES, BENJAMIN A				
ART UNIT		PAPER NUMBER		
2442				
NOTIFICATION DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

09/843,816

Applicant(s)

MCGUIRE, JACOB

Examiner

BENJAMIN AILES

Art Unit

2442

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-18 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-18 and 20-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to correspondence filed 16 July 2008. This action is non-final.
2. Claims 1-8, 10-18 and 20-23 remain pending.

Response to Amendment

3. With respect to the rejection of claims 1-8, 10-11 and 23 under 35 USC 101 as directed to non-statutory subject matter, the rejection has been withdrawn in view of the applicant's amendment.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-4, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merchant et al. (US 2002/0128815 A1), hereinafter referred to as Merchant, in view of Stewart et al. (US 6,970,927 B1), hereinafter referred to as Stewart.

7. Regarding claim 1, Merchant teaches a computer-readable medium comprising a uniform interface for configuring and managing a plurality of different types of network devices, comprising:

a library containing generic commands that can be applied to said network devices (page 2, paragraph 0028, lines 3-10; Merchant teaches storage of device independent commands and device specific commands.);

a plurality of plug-in modules that can register with said library, each of said modules operating to convert at least some of said generic commands into device-specific commands and transmit said device-specific commands to remote individual devices of a type that are associated with the module (p. 3, para. 0044; Merchant teaches device-independent modules that translate device related independent commands into device specific commands.).

Merchant teaches the creation of generic commands (para. 0044) but does not clearly teach the generic command that "puts a device into its most privileged level through an established connection to the device." However, in related art, Stewart teaches the placing of a device in a most privileged level in a similar environment wherein devices in a network system are placed in different privilege levels for different users in the system (col. 4, ll. 5-62). One of ordinary skill in the art at the time of the

applicant's invention would have found it obvious to combine the teachings of Merchant with the teachings of Stewart. One of ordinary skill would have been motivated to make such a combination wherein it is taught by Stewart to provide different privilege levels for users within the device (col. 4, ll. 54-62).

8. Regarding claim 2, Merchant and Stewart teach the use of a communications network but do not explicitly detail "plug-in modules transmit each of said commands in accordance with a transmission protocol specific to the individual devices, respectively" and further "wherein one of said transmission protocols comprises Telnet". However, Official Notice is taken that the use of specific transmission protocols, including Telnet, was old and well known in the art. It would have been obvious to one of ordinary skill at the time of the applicant's invention to utilize a specific transmission protocol, for example Telnet, in order for network communication to be possible.

9. Regarding claim 3, Merchant and Stewart teach the use of a communications network but do not explicitly detail "plug-in modules transmit each of said commands in accordance with a transmission protocol specific to the individual devices, respectively" and further "wherein one of said transmission protocols comprises Telnet". However, Official Notice is taken that the use of specific transmission protocols, including Telnet, was old and well known in the art. It would have been obvious to one of ordinary skill at the time of the applicant's invention to utilize a specific transmission protocol, for example Telnet, in order for network communication to be possible.

10. Regarding claim 4, Merchant and Stewart teach the computer-readable medium wherein another one of said generic commands establishes a connection to a network

device through which configuration commands can be sent and information can be retrieved (Merchant, p. 2, para. 29 and para. 31; Merchant teaches the sending of configuration signals and the querying for configuration information.).

11. Regarding claim 10, Merchant and Stewart teach the computer-readable medium wherein said library is responsive to the receipt of a command for a given device to determine the module that corresponds to said given device and provide the received command to said module (Merchant, p. 3, para. 0044).

12. Regarding claim 11, Merchant and Stewart teach the computer-readable medium wherein said modules convert responses received from the individual devices with which they are associated into a generic format for presentation to said library (Merchant, p. 4, para. 0046).

13. Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merchant and Stewart and further in view of Tindal (US 7,246,162).

14. Regarding claim 5, Merchant and Stewart teach the computer-readable medium comprising a uniform interface as claimed in claim 1 but do not clearly recite one of the generic commands retrieving the current configuration of a network device by executing appropriate commands on the device. Tindal teaches the retrieval of configurations

using messaging for configuring and reconfiguring purposes (col. 4, line 59 - col. 5, line

8). One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to combine the teachings of Tindal with Merchant and Stewart. One of ordinary skill in the art would have been motivated to make such a combination as

suggested by Merchant to query and receive current configurations of devices (p. 2, para. 0031) and Tindal to configure and reconfigure devices (col. 5, ll. 1-5).

15. Regarding claim 8, Merchant and Stewart teach the computer-readable medium comprising a uniform interface as claimed in claim 1 including the creation of generic commands (para. 0044) but does not clearly teach the step "wherein one of said generic commands gives a device a complete configuration based on information from a stored configuration file". However, in related art, Tindal teaches the retrieval of configurations using messaging for configuring and reconfiguring purposes (col. 4, line 59 - col. 5, line 8). One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to combine the teachings of Tindal with Merchant and Stewart. One of ordinary skill in the art would have been motivated to make such a combination as suggested by Merchant to query and receive current configurations of devices (p. 2, para. 0031) and Tindal to configure and reconfigure devices (col. 5, ll. 1-5).

16. Claims 6, 7 and 23 are rejected under 35 USC 103(a) as being unpatentable over Merchant and Stewart in view of Rangachar (US 6,301,252 B1).

17. Regarding claim 6, Merchant and Stewart teach the computer-readable medium comprising a uniform interface claimed in claim 1 including the querying of configuration information with respect to the network device that is queried (Merchant, para. 0032) but does not clearly teach the step to "render configuration information suitable for storage and saves it to a local file system". However, in related art, Rangachar teaches in a similar environment wherein generic commands are utilized and translated into a device

specific command a generic command can be created which retrieves the configuration information with respect to a network device and this information is stored in a centralized control and management storage wherein the centralized control and management location stores the "state" of the network device (col. 7, ll. 5-22). One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to combine the teachings of Merchant and Stewart with the teachings of Rangachar. One of ordinary skill would have been motivated to make such a combination wherein it is taught by Rangachar to within a system wherein generic commands are utilized, it is beneficial to further enhance network reliability and interoperability of switches and have further control over network switches (col. 4, ll. 18-24).

18. Regarding claim 7, Merchant and Stewart teach the system as claimed in claim 1 including the creation of generic commands (Stewart, para. 0044) but do not clearly teach the step to "put a device into a mode where it can accept configuration commands through an established connection at an enabled level". However, in related art, Rangachar teaches in a similar environment wherein generic commands are utilized and translated into a device specific command a generic command can be created which can control and make modifications to a network switch. Rangachar teaches the controlling and management of network switches (col. 4, ll. 58-62). One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to combine the teachings of Merchant and Stewart with the teachings of Rangachar. One of ordinary skill would have been motivated to make such a combination wherein it is

taught by Rangachar to within a system wherein generic commands are utilized, it is beneficial to further enhance network reliability and interoperability of switches and have further control over network switches (col. 4, ll. 18-24).

19. Regarding claim 23, Merchant teaches the utilization of network devices but does not explicitly teach the network devices being from a group consisting of switches, firewalls, routers and load balancers. However, in related art, Rangachar teaches the management of network switches (col. 4, ll. 5-11). One of ordinary skill in the art would have found it obvious to utilize the teachings of Merchant for the control of different network devices like switches, firewalls, routers and load balancers. One of ordinary skill would have been motivated because these are common network devices as taught by Rangachar.

20. Claim 12-16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merchant in view of Tindal (US 7,246,162).

21. Regarding claim 12, Merchant discloses a uniform interface for configuring and managing a plurality of different types of network devices, comprising:

- a library containing generic commands that can be applied to said network devices (page 2, paragraph 0028, lines 3-10; Merchant teaches storage of device independent commands and device specific commands.);

- a plurality of plug-in modules that can register with said library, each of said modules operating to convert at least some of said generic commands into device-specific commands and transmit said device-specific commands to remote individual devices of a type that are associated with the module (p. 3, para. 0044; Merchant

teaches device-independent modules that translate device related independent commands into device specific commands.).

Merchant teaches the system as claimed in claim 1 but do not clearly recite one of the generic commands retrieving the complete configuration of a network device by executing appropriate commands on the device. Tindal teaches the retrieval of configurations using messaging for configuring and reconfiguring purposes (col. 4, line 59 - col. 5, line 8). One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to combine the teachings of Tindal with Merchant. One of ordinary skill in the art would have been motivated to make such a combination as suggested by Merchant to query and receive current configurations of devices (p. 2, para. 0031) and Tindal to configure and reconfigure devices (col. 5, ll. 1-5).

22. Regarding claim 13, Merchant and Tindal teach the use of a communications network but does not explicitly detail "plug-in modules transmit each of said commands in accordance with a transmission protocol specific to the individual devices, respectively" and further "wherein one of said transmission protocols comprises Telnet". However, Official Notice is taken that the use of specific transmission protocols, including Telnet, was old and well known in the art. It would have been obvious to one of ordinary skill at the time of the applicant's invention to utilize a specific transmission protocol, for example Telnet, in order for network communication to be possible.

23. Regarding claim 14, Merchant and Tindal teach the use of a communications network but does not explicitly detail "plug-in modules transmit each of said commands in accordance with a transmission protocol specific to the individual devices,

respectively” and further “wherein one of said transmission protocols comprises Telnet”. However, Official Notice is taken that the use of specific transmission protocols, including Telnet, was old and well known in the art. It would have been obvious to one of ordinary skill at the time of the applicant’s invention to utilize a specific transmission protocol, for example Telnet, in order for network communication to be possible.

24. Regarding claim 15, Merchant and Tindal teach the system wherein one of said generic commands establishes a connection to a network device through which configuration commands can be sent and information can be retrieved (Merchant, p. 2, para. 29 and para. 31; Merchant teaches the sending of configuration signals and the querying for configuration information.).

25. Regarding claim 16, Merchant teaches the system as claimed in claim 1 but does not clearly recite one of the generic commands retrieving the current configuration of a network device by executing appropriate commands on the device. Tindal teaches the retrieval of configurations using messaging for configuring and reconfiguring purposes (col. 4, line 59 - col. 5, line 8). One of ordinary skill in the art at the time of the applicant’s invention would have found it obvious to combine the teachings of Tindal with Merchant. One of ordinary skill in the art would have been motivated to make such a combination as suggested by Merchant to query and receive current configurations of devices (p. 2, para. 0031) and Tindal to configure and reconfigure devices (col. 5, ll. 1-5).

26. Regarding claim 21, Merchant and Tindal teach the method wherein said modules convert responses received from the individual devices with which they are associated into a generic format for presentation to said library (p. 4, para. 0046).

27. Claims 17, 18 and 22 are rejected under 35 USC 103(a) as being unpatentable over Merchant and Tindal in view of Rangachar (US 6,301,252 B1).

28. Regarding claim 17, Merchant and Tindal teach the method as claimed in claim 12 including the querying of configuration information with respect to the network device that is queried (Merchant, para. 0032) but do not clearly teach the step to "render configuration information suitable for storage and saves it to a local file system".

However, in related art, Rangachar teaches in a similar environment wherein generic commands are utilized and translated into a device specific command a generic command can be created which retrieves the configuration information with respect to a network device and this information is stored in a centralized control and management storage wherein the centralized control and management location stores the "state" of the network device (col. 7, ll. 5-22). One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to combine the teachings of Merchant with the teachings of Rangachar. One of ordinary skill would have been motivated to make such a combination wherein it is taught by Rangachar to within a system wherein generic commands are utilized, it is beneficial to further enhance network reliability and interoperability of switches and have further control over network switches (col. 4, ll. 18-24).

29. Regarding claim 18, Merchant and Tindal teach the method as claimed in claim 12 including the creation of generic commands (Merchant, para. 0044) but do not clearly teach the step to “put a device into a mode where it can accept configuration commands through an established connection at an enabled level”. However, in related art, Rangachar teaches in a similar environment wherein generic commands are utilized and translated into a device specific command a generic command can be created which can control and make modifications to a network switch. Rangachar teaches the controlling and management of network switches (col. 4, ll. 58-62. One of ordinary skill in the art at the time of the applicant’s invention would have found it obvious to combine the teachings of Merchant and Tindal with the teachings of Rangachar. One of ordinary skill would have been motivated to make such a combination wherein it is taught by Rangachar to within a system wherein generic commands are utilized, it is beneficial to further enhance network reliability and interoperability of switches and have further control over network switches (col. 4, ll. 18-24).

30. Regarding claim 22, Merchant teaches the utilization of network devices but does not explicitly teach the network devices being from a group consisting of switches, firewalls, routers and load balancers. However, in related art, Rangachar teaches the management of network switches (col. 4, ll. 5-11). One of ordinary skill in the art would have found it obvious to utilize the teachings of Merchant for the control of different network devices like switches, firewalls, routers and load balancers. One of ordinary skill would have been motivated because these are common network devices as taught by Rangachar.

31. Claim 20 is rejected under 35 USC 103(a) as being unpatentable over Merchant and Tindal in view of Stewart.

Regarding claim 20, Merchant teaches the creation of generic commands (para. 0044) but does not clearly teach the generic command that “puts a device into its most privileged level through an established connection to the device.” However, in related art, Stewart teaches the placing of a device in a most privileged level in a similar environment wherein devices in a network system are placed in different privilege levels for different users in the system (col. 4, ll. 5-62). One of ordinary skill in the art at the time of the applicant’s invention would have found it obvious to combine the teachings of Merchant with the teachings of Stewart. One of ordinary skill would have been motivated to make such a combination wherein it is taught by Stewart to provide different privilege levels for users within the device (col. 4, ll. 54-62).

Response to Arguments

Claims 1-4 and 10-11

Applicant’s arguments, see Remarks, filed 16 July 2008, with respect to the rejection(s) of claim(s) 1-4 and 10-11 under 35 USC 103(a) in view of Merchant (US 2002/0128815 A1) and Alonso (US 6,434,700) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Merchant and Stewart (US 6,970,927 B1).

Claims 12-16 and 21

32. With respect to the rejection of claims 12-16 and 21 as being obvious under 35 U.S.C. 103(a) in view of Merchant and Tindal (US 7,246,162), applicant argues (a) with respect to claim 12 that the cited prior art does not teach "wherein one of said generic commands gives a device a complete configuration based on information from a stored configuration file."

33. (a) With respect to argument (b), the examiner respectfully disagrees. The examiner maintains that Merchant teaches the utilization of generic commands. Merchant teaches on page 2, para. 0028, lines 3-10 the utilization of high level commands that are translated into independent device commands. As set forth in the rejection, Merchant does not explicitly teach on the aspect of a complete configuration based on information from a stored configuration file. Tindal teaches on this aspect and is found to be within the scope of the claim wherein Tindal teaches in column 4, line 59 through column 5, line 8 wherein the acquisition of configuration records. Tindal teaches the acquisition of configuration information to completely configure or reconfigure network devices. Appropriate attributes are acquired and applied for specific types of network devices, for example based on brand. This aspect of applying configuration parameters to configure or reconfigure is deemed within the scope and is found to include the "complete configuration" as claimed. The combination set forth above of Merchant and Tindal is therefore maintained and found to teach "wherein one of said generic commands gives a device a complete configuration based on information from a stored configuration file."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin Ailes whose telephone number is (571)272-3899. The examiner can normally be reached Monday-Friday, 5:30-8:30AM, 1:00-6:00PM, IFP Hoteling schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. A. A./
Examiner, Art Unit 2142

/Andrew Caldwell/
Supervisory Patent Examiner, Art
Unit 2442